[00022] Having thus set forth the nature of the invention, what is claimed herein is:

1. An antenna system for an aircraft for use with a global positioning system comprising:

an aircraft having an aircraft attitude determination system providing attitude data relating to aircraft roll;

a translation module connected to the aircraft attitude determination system receiving the attitude data and outputting output data;

a processor receiving the output data from the translation module and providing a drive signal;

a controller receiving the drive signal from the processor

an articulator driven by the controller; and

antenna attached to the articulator driven by the controller oppositely to the aircraft roll.

2. The antenna system of claim 1 wherein the aircraft attitude determination system is an internal navigation system.

3. The antenna system of claim 1 wherein the antenna is contained within a radome mounted to the airplane.

4. The antenna system of claim 1 wherein the articulator is contained in a mount on an exterior portion of the aircraft.

5. The antenna system of claim 1 wherein the articulator further comprises a linear motor.

6. The antenna system of claim 1 wherein the processor has a feedback loop.

7. The antenna system of claim 1 wherein the antenna is maintained substantially vertical at least up to about forty five degrees of roll of the aircraft.

8. The antenna system of claim 7 wherein the antenna is maintained vertical.

9. The antenna system of claim 1 wherein the translation module provides output data in one of digital and analog data.

10. An antenna system for an aircraft for use with a global positioning system comprising:

an aircraft having an aircraft attitude determination system providing attitude data relating to aircraft roll;

a processor receiving an input originating from the aircraft attitude determination system and providing a drive signal;

a controller receiving the drive signal from the processor;

an articulator driven by the controller; and

antenna attached to the articulator driven by the controller oppositely to the aircraft roll.

11. The antenna system of claim 10 wherein the processor provides a dead zone wherein a change in aircraft roll of less than about five degrees does not result in movement of the antenna.

12. The antenna system of claim 10 wherein the aircraft attitude determination system is an inertial navigation system.

13. The antenna system of claim 10 wherein the articulator is contained in a mount on the exterior portion of the aircraft and a radome surrounds the antenna.

14. The antenna system of claim 10 wherein the articulator further comprises a linear motor.

15. The antenna system of claim 10 wherein the aircraft is maintained substantially vertical at least up to about 45 degrees of aircraft roll.

16. The antenna system of claim 15 wherein the antenna is maintained vertically.

17. An antenna system for an aircraft for use with a global positioning system comprising:

an aircraft having an aircraft attitude determination system sensing attitude data relating to aircraft roll;

a translation module connected to the aircraft attitude determination system receiving the attitude data and outputting output data;

a processor receiving the output data from the translation module and providing a drive signal;

a controller receiving the drive signal from the processor;

an articulator driven by the controller; and

antenna attached to the articulator driven by the controller oppositely to the aircraft roll.

18. The antenna system of claim 17 wherein the articulator is contained in a mount on the exterior portion of the aircraft and a radome surrounds the antenna.

19. The antenna system of claim 17 wherein the antenna is maintained substantially at least up to about 45 degrees of roll of the aircraft.

20. The antenna system of claim 19 wherein the antenna is maintained vertically relative to the roll of the aircraft.